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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/859,674	05/18/2001	Robert L. Phillips	82001-0310	3354

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EXAMINER
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NELSON, FREDA ANN

ART UNIT	PAPER NUMBER
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3639

DATE MAILED: 01/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/859,674	Applicant(s) PHILLIPS ET AL.	
	Examiner Freda A. Nelson	Art Unit 3639	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2005.  
 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-22, 25-39 and 47-50 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 1-4, 6-22, 25-39 and 47-50 is/are rejected.  
 7) ☒ Claim(s) 18 and 47-50 is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

The amendment received on November 1, 2005 is acknowledged and entered. Claims 1, 6-9, 11, 18, 25-28, and 47 have been amended. Claims 5, 23-24, and 40-46 have been canceled. claims 48-50 have been added. Claims 1-4, 6-22, 25-39 and 47-50 are currently pending.

### ***Response to Amendment and Arguments***

Applicant's arguments with respect to claims 1, 18, and 47 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Objections***

1. Claims 18 and 47 are objected to because of the following informalities:

In claim 18, line 3, "seller,' should be "seller;"; and

In claim 47, line 4, "objective," should be "objective;".

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-50 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter

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which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

3. As for claims 1, 18 , and 47 the examiner is unable to find reference to “current sales” and “first optimal price” and “second optimal price in real time”.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As for claim 3, the limitation is incomplete.

### ***Claim Rejections - 35 USC § 102***

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claim rejected under 35 U.S.C. 102(e) as being anticipated by Ouimet et al. (US 6,094,641).

As for Claim 1, Ouimet et al. discloses a system comprising:  
means for collecting and storing data on past sales (see Figs. 1-2);  
means for forecasting normalized future sales volume based upon the past sales data (see Figs. 1-2., col . 2, line 54 - col. 2, line 17);  
means for forecasting normalized future sales volume based upon the past sales

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data (col. 3, lines 1-13);

means for determining price sensitivity of consumers to changes in price of the product based upon past data (see col. 7, line 34 - col. 8, line 50);

means for forecasting future sales volume at different prices by adjusting the normalized future sales volume forecast by the price sensitivity (see Figs. 5 and 8)., and

means for accepting user input to define for one or more strategic objectives (abstract);

means for determining an optimal price that maximizes profits using the future sales volume forecast and costs for the product (see Supra columns).

As for Claim 2, Ouimet et al. further discloses the system including means for classifying the past sales into one or more channel segments, whereby each of the past sales is classified into only one channel segment (see the various "Pricing Models", col. 3 - col. 8).

As for Claim 3, Ouimet et al. further discloses the system, wherein the means for determining an optimal price determines an optimal price in each of the channel segments (see Id.).

As for Claim 4, Ouimet et al. further discloses the system, wherein the costs for the product include a different channel segment cost in each of the channel segments (see the pricing models in col. 5 - col. 8).

As for Claim 6, Ouimet et al. further discloses the system, wherein one of said strategic objectives is a minimum price for the product (see col. 1, lines 20-50).

As for Claim 7, Ouimet et al. further discloses the system, wherein one of said strategic objectives is a maximum price for the product (see Supra columns 1-2, 7-8).

As for Claim 8, Ouimet et al. further discloses the system, wherein one of said strategic objectives is a minimum sales volume for the product (see Id.).

As for Claim 9, Ouimet et al. further discloses the system, wherein one of said strategic objectives is a maximum sales volume for the product (see Id.).

As for Claim 10, Ouimet et al. further discloses the system including a means for forecasting a response of a competitor to a change in the price of the product by the seller, whereby the means for forecasting future sales volume at different prices accounts for the competitor's response (see Supra column 4).

As for Claim 11, Ouimet et al. further discloses the system including means for determining lost sales data, whereby the means for forecasting future sales volume at different prices accounts for the competitor's response (see Id.).

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As for Claim 12, Ouimet et al. further discloses the system including a means for alerting the seller of an occurrence of a pre-specified event (see Supra column 8).

As for Claim 13, Ouimet et al. further discloses the system, wherein the means for alerting the seller compares prices for actual sales to the optimal price, and the pre-specified event is a difference between the actual sales and the optimal price (see Id.).

As for Claim 14, Ouimet et al. further discloses the system, wherein the means for alerting the seller compares actual sales at the optimal price to the forecasted sales volumes at the optimal price (see col. 3, line 43 - col. 4, line 24).

As for Claim 15, Ouimet et al. further discloses the system, wherein the pre-specified event occurs when a ratio of actual sales volume to the forecasted sales volume is less than a first pre-specified amount (see Col. 5, line 14 - col. 6, line 26).

As for Claim 16, Ouimet et al. further discloses the system, wherein the pre-specified event occurs when the forecasted sales volume exceeds the actual sales volume by more than a second pre-specified amount (see Id.).

As for Claim 17, Ouimet et al. further discloses the system, wherein the mean for determining price sensitivity uses a logistic mathematical model (see Supra various pricing models).

As for Claim 18, Ouimet et al. discloses a method of dynamically pricing a product, the method comprising the steps of:

- accepting and storing one or more strategic objectives from a seller (col.3, lines 1-26),

- collecting data on past sales (see col. 3, lines 1-13);
- forecasting normalized future sales volume based upon the past sales data (see col. 3, line 43 - col. 4, line 24);

- determining price sensitivity of consumers to changes in price of the product based upon the past sales data (see Id.);

- forecasting future sales volume at different prices by adjusting the normalized future sales volume forecast by the price sensitivity (see Supra columns and cols. 3-8 for the pricing models; and

- determining an optimal price that maximizes profits using the future sales volume forecast and costs for the product (see Id.).

As for Claim 19, Ouimet et al. further discloses the method including the step of dynamically determining the costs for the product (see Supra columns 3-4).

As for Claim 20, Ouimet et al. further discloses the method including the step of classifying the past sales into different channel segments, wherein each of the past

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sales is classified into only one of the channel segments and wherein the step of forecasting future sales at different prices further comprises forecasting future sales in each of the channel segments (see Supra columns 3-6).

As for Claim 21, Ouimet et al. further discloses the method, wherein the costs for the product include a different channel segment cost for each of the channel segments (see Id.).

As for Claim 22, Ouimet et al. further discloses the method, wherein the step of determining an optimal price is performed for each of the channel segments (see Optimization Process in Supra column 4).

As for Claim 25, Ouimet et al. further discloses the method, wherein one of said strategic objectives is a minimum price for the product (see Supra column 1).

As for Claim 26, Ouimet et al. further discloses the method, wherein one of said strategic objectives is a maximum price for the product (see Supra columns 1-2, 7-8).

As for Claim 27, Ouimet et al. further discloses the method, wherein one of said strategic objectives is a minimum sales volume for the product (see Id.).

As for Claim 28, Ouimet et al. further discloses the method, wherein one of said strategic objectives is a maximum sales volume for the product (see Id.).

As for Claim 29, Ouimet et al. further discloses the method, wherein the step of forecasting future sales volume further accounts for inventory of the product (see Supra columns 1-2).

As for Claim 30, Ouimet et al. further discloses the method, wherein the inventory accounts for the forecasted sales for the product at the optimal price (see the optimizing process, col. 5 - col. 6).

As for Claim 31, Ouimet et al. further discloses the method, wherein the step of forecasting future sales volume further accounts for an expected response of a competitor (see Supra column 4).

As for Claim 32, Ouimet et al. further discloses the method, wherein the step of forecasting future sales volume further accounts for lost sales data (see Id.).

As for Claim 33, Ouimet et al. further discloses the method, further comprising the step of comparing actual sales at the optimal price to forecasted sales volumes at the optimal price (see Supra optimizing process, cols. 5-6).

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As for Claim 34, Ouimet et al. further discloses the method including the step of adjusting the optimal price to account for actual sales (see col. 6, line 29 - col. 8, line 20).

As for Claim 35, Ouimet et al. further discloses the method including the step of alerting the seller when the ratio of actual sales volume to forecasted sales volume at the optimal price is less than a first pre-specified amount (see col. 3, line 43 - col. 4, line 24).

As for Claim 36, Ouimet et al. further discloses the method including the step of alerting the seller when the actual sales volume is less than the forecasted sales volume by more than a second pre-specified amount (see Col. 5, line 14 - col. 6, line 26).

As for Claim 37, Ouimet et al. further discloses the method, wherein the step of determining an optimal price further comprising accounting for a volume discount for the product (see Id.).

As for Claim 38, Ouimet et al. further discloses the method, wherein the step of determining price sensitivity further comprises using a logistic mathematical model (see Supra various pricing models).

As for Claim 39, Ouimet et al. further discloses the method, wherein the step of determining price sensitivity future comprises accounting for a relationship between sales of the product and a second product (see Supra column 8).

As for Claim 47, Ouimet et al. further discloses a program storage device readable by a machine, tangibly embodying a program of instructions executable by a machine to perform method steps for dynamically determining a price a product, said method steps comprising:

- accepting and storing one or more strategic objectives (col. 3, lines 1-26),
- collecting data on past sales (see col. 3, lines 1-13);
- forecasting normalized future sales volume based upon the past sales data (see col. 3, line 43 - col. 4, line 24);

- determining price sensitivity of consumers to changes in price of the product based upon the past sales data using a price sensitivity function (see Id.);

- forecasting future sales volume at different prices by adjusting the normalized future sales volume forecast by the price sensitivity (see Supra columns and cols. 3-8 for the pricing models; and

- determining a first optimal price according to the strategic objectives using the future sales volume forecast and costs for the product;

- collecting current sales data on the sales of the product at the first optimal price in real time;



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repeating in real time said steps of forecasting normalized future sales volume, determining price sensitivity of consumers, and forecasting future sales volume at different prices using said past and current sales data; and

determining in real time a second improved optimal price according to the strategic objectives using the future sales volume forecast for past and current sales and costs for the product.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

5. The following is an examiner's statement of reasons for allowance:

A) The prior art for example:

(1) Ouimet et al. (Patent Number 6,094,641) disclose a method for incorporating psychological effects into demand models.

However, in regard to claims 48-50 the prior art does not teach or suggest

specific manner in which the logistic mathematical model is used to determine price sensitivity.

6. Claims 48-50 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. As allowable subject matter has been indicated, applicant's response must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 C.F.R. § 1.111(b) and section 707.07(a) of the M.P.E.P.


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Freda A. Nelson whose telephone number is (571) 272-7076. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hayes can be reached on 571-272-6708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

FAN 01/06/2006

A handwritten signature in black ink, appearing to read "Freda Nelson". The signature is fluid and cursive, with the first name "Freda" and last name "Nelson" clearly distinguishable.A handwritten signature in black ink, appearing to read "John W. Hayes". The signature is cursive and stylized, with the first name "John" and last name "Hayes" clearly distinguishable.

**JOHN W. HAYES**  
**SUPERVISORY PATENT EXAMINER**